

Date: Wednesday, 4/4/2007 9:14:57 AM
User: Kim Johnston

Process Sheet

Customer	CU-DAR001 Dart Helicopters Services		Drawing Name	R44 WEARPLATE		
Job Number	31633		Part Number	D35651		
Estimate Number	12651		Drawing Number	D3565 REV A B		
P.O. Number	:		Project Number	N/A		
This Issue	4/4/2007	S.O. No. :	Drawing Revision	A		
Prsht Rev.	NC		Material	:		
First Issue	11	Type : SMALL /MED FAB	Due Date	4/20/2007	Qty:	40
Previous Run	31166		Um:	Each		
Written By	:					
Checked & Approved By	907.04.04					
Comment	Est Rev :A New Issue 07-01-16 JLM					

Additional Product

Job Number:



GWF

Seq. #:	Machine Or Operation:	Description :
1.0	M304S20GA	304/316 .040 Sheet .060"
		Comment: Qty.: 0.3759 sf(s)/Unit Total : 15.0360 sf(s) 304/316-.040 Sheet Batch: m101813
		m 07 06 17 m 07 04 25
2.0	WATER JET	FLOW WATER JET
		Comment: FLOW WATER JET 1-Cut as per Dwg D3565 Dwg Rev: B Prog Rev: B
		m 07 06 17 m 07 04 25
		2-Deburr if necessary
3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
		m 07 06 17 m 07 04 25
		Comment: INSPECT PARTS AS THEY COME OFF MACHINE
4.0	QC8	SECOND CHECK
		Comment: SECOND CHECK
5.0	BRAKE NC	NC BRAKE
		Comment: NC BRAKE form 90 deg bend as per Dwg D3565

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: Production engineering NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07.04.26	1	Wrong mat'l thickness on IPP, dug calls up 0.060", IPP 0.040".	IP 07.04.26 per QSI042	SCRAP all parts	IP 07.06.18	EN 07.06.18	IP 07.04.26 per QSI042	IP 07.04.26
07.11.13	7	5 piece creek at the hand	IP QSI042	Scrap & destroy	IP 07.11.13	IP 07.11.13	IP 07.11.13	IP 07.11.13
07.11.26	5.0	Scrap all parts they DO not conform	IP QSI042	Scrap. Engineering to revise drawing to improve manufacturability. EC do-making prototype.	IP 07.11.26 IP 07.11.26	IP 07.11.26	IP 07.11.26	IP 07.11.26

NOTE: Date & initial all entries *10/11/2013*

* Made prototype, delivered to Learne

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: R44 WEARPLATE

Job Number: 31633

Part Number: D35651

Job Number:



Seq. #: Machine Or Operation:

Description :

6.0 QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

7.0 SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



PTO

Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Form "Cups" using DT8902 FORMING TOOL.

4/07/11/13 358

80

2-Open Holes to .257" as per Dwg D3565, after forming.

8.0 QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

9.0 LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld hard facing as per Dwg D3565 using DT8903 Holding Plate

A/R 2059B Hard Coat rod Batch: _____

10.0 QC5/9

WELD INSPECTION



Comment: WELD INSPECTION

11.0 POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

12.0 QC3

INSPECT POWDER COAT/ CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/ CHEMICAL CONVERSION

13.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 4/4/2007 9:14:57 AM
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Job Number: 31633

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Job Number:



Seq. #: Machine Or Operation:

Description :

14.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



4/8/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

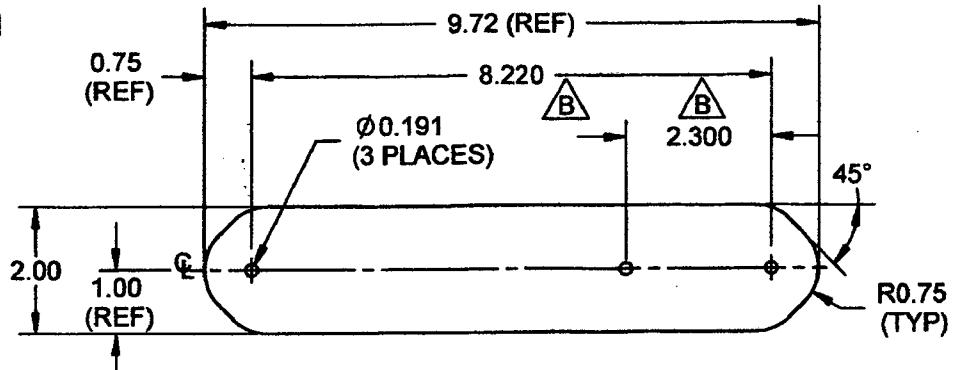
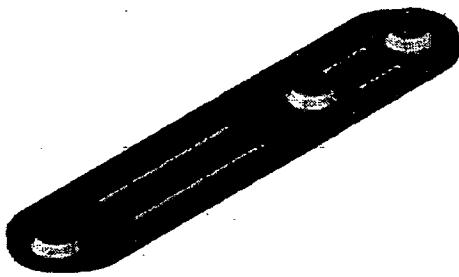
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
	#							

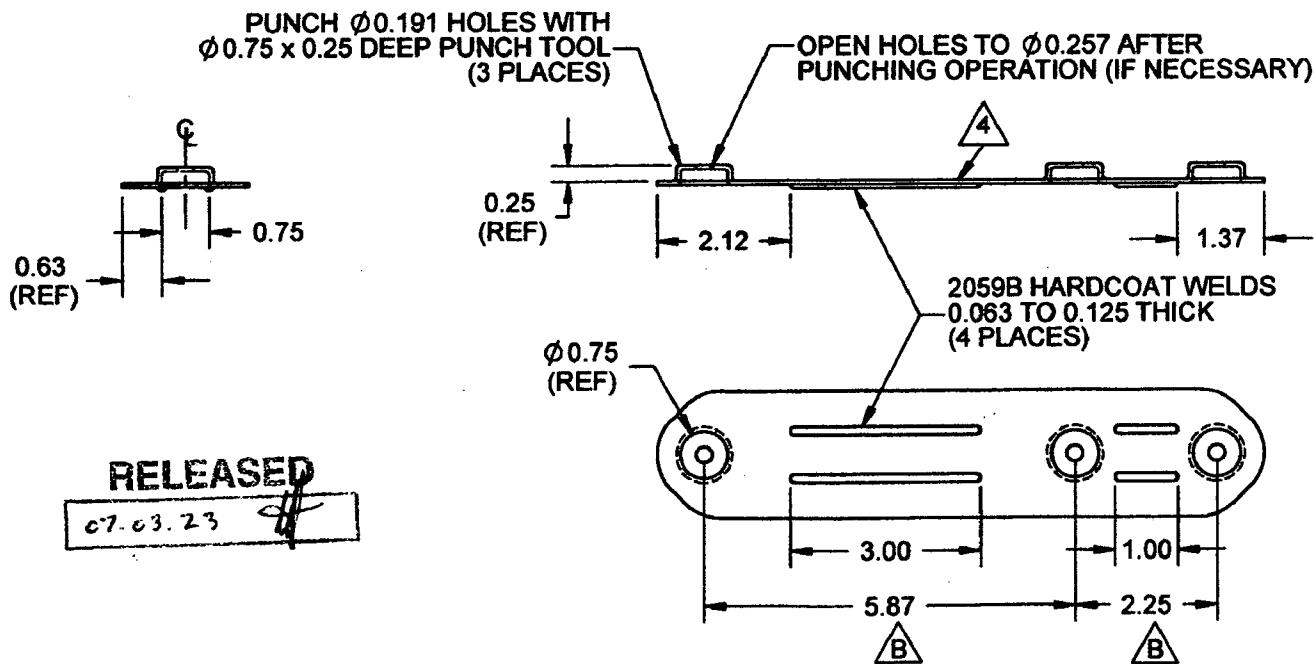
NOTE: Date & initial all entries

DART

DESIGN <i>CB</i>	DRAWN BY <i>CB</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>AS</i>	APPROVED <i>CH</i>	DRAWING NO. D3565	
DATE 07.03.12	TITLE R44 WEARPLATE		SCALE 1:3
REV A	DATE 07.01.09	DESCRIPTION NEW ISSUE	
REV B	DATE 07.03.12	8.220 WAS 8.120; 2.300 WAS 2.250; ADD HOLE DIMS AFTER CUP FORMING	



D3565-1F FLAT PATTERN



D3565-1 R44 WEARPLATE

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, 16 GAUGE (0.063 THICK) (REF DART SPEC M304S16GA)
- 2) FINISH: POWDER COAT "GREY SANTEX" (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) IDENTIFY WITH DART P/N "D3565-1" USING FINE POINT PERMANENT INK MARKER
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX
- 7) WELD PER QSI 004
- 8) PART IS SYMMETRIC ABOUT $\frac{1}{4}$

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DART AEROSPACE LTD

Work Order: 31633

Description: R44 Wearplate

Part Number: D3565-1

Inspection Dwg: D3565

Rev: B

Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST



First Article



Prototype

Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A $\phi 0.191$	$+0.005 -0.001$	0.193	✓		vern	
B 9.72	$+1 -0.030$	9.725	✓		vern	
C 8.220	$+1 -0.010$	8.220	✓		vern	
D 2.00	$+1 -0.030$	1.002	✓		vern	
E 2.300	$+1 -0.010$	2.298	✓		vern	
F						
G						
H						
I						
J						
K						
L						
M						
N						
O						
P						
Q						
R						
S						
T						
U						
V						
W						
X						
Y						

Measured by: M. M

Audited by: _____

Prototype Approval: N/A

Date: 01/04/25

Date: _____

Date: N/A

Rev	Date	Change	Revised by	Approved
		3 New Issue	KJ/RF	

DART AEROSPACE LTD

Work Order: 31633

Description: R44 Wearplate

Part Number: D3565-1

Inspection Dwg: D3565 Rev: B

Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST



First Article



Prototype

Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A $\phi 0.191$	+0.005 -0.001	0.192	✓		VERN	
B 2.00	+1-0.030	2.003	✓		VERN	
C 1.00	+1-0.030	1.001	✓		VERN	
D 8.220	+1-0.010	8.212	✓		VERN	
E 9.72	+1-0.030	9.713	✓		VERN	
F 0.75	+1-0.030	0.74	✓		VERN	
G						
H						
I						
J						
K						
L						
M						
N						
O						
P						
Q						
R						
S						
T						
U						
V						
W						
X						
Y						

Measured by:	<i>M. M.</i>
Date:	07/05/17

Audited by:	<i>Sp</i>
Date:	07/06/17

Prototype Approval:	N/A
Date:	N/A

Rev	Date	Change	Revised by	Approved
		+ New Issue	KJ/RF	